ABSTRACT

BACKGROUND AND AIMS

Hypertensive disorders occur in 6 %- 8% of pregnancies and contribute significantly to stillbirths and neonatal morbidity and mortality. They are one of the leading cause of maternal mortality- accounting for almost 15% of such deaths. Worldwide, over half a million women die each year because of pregnancy-related causes, and 99% of these deaths occur in the developing world.

A variety of biochemical and biophysical markers, have been proposed for the purpose of predicting the development of preeclampsia in pregnancy. Screening for these factors in the second trimester of pregnancy will help in early detection of hypertensive disorders of pregnancy, thus enabling

1. Early identification of patients at risk of developing preeclampsia and eclampsia.
2. Prophylactic medication to prevent hypertension or to reduce its severity.
3. Prophylactic proper antenatal care.

METHODS

A prospective study was done to determine the role of βhcg in 100 pregnant women in their second trimester (13-20) weeks, attending TVMCH OPD.Routine antenatal investigations were done. 5 ml of venous blood sample was collected and tests were carried out. Estimation of serum beta hcg level was done by enzyme linked fluorescence immunoassay. In antenatal clinic, the patients were followed up.Their frequency of visits are once in a month till 28 weeks, once in 15 days upto 34 weeks and weekly till delivery.

RESULTS

From the study it was found, women who have elevated βHCG values in 13-20 weeks are at increased risk of developing PIH. For any test to be used as a screening tests it should have good sensitivity, specificity and positive predictive value.In this study β hcg had Sensitivity – 71.4% , Specificity-87.1%.

CONCLUSION

While comparing patients with normal BP and pre eclampsia - βHCG values are elevated in patients with pre eclampsia. The sensitivity and specificity of βHCG are very low to be useful as a mass screening marker on its own and therefore it should be combined with other serum markers and ultrasound parameters like Doppler study of uterine vessels, which will help in

improving its role as a screening tool.

KEYWORDS : preeclampsia, hypertensive disorder of pregnancy, β hcg,screening.